

ABSTRACT OF THE DISCLOSURE

Each pixel has a main pixel and a sub pixel. Each pixel has a color filter. The color filters are respectively arranged
5 above a main photosensitive portion of the main pixel and a sub photosensitive portion of the sub pixel. The thickness of the color filters above the main and sub photosensitive portions is different from each other, so that spectral sensitivity characteristics of the main and sub photosensitive portions are
10 respectively different. In a WB gain determiner, the type of illumination light source is judged by comparing image signals taken out from the main and sub pixels. The WB gain determiner determines a gain correction coefficient based on the type of illumination light source. The gain correction in each RGB color
15 is performed according to the gain correction coefficient to adjust the white balance.